

Louisville Metro Air Pollution Control District
850 Barret Ave., Louisville, Kentucky 40204
06 27 2014

**Federally Enforceable District Origin Operating Permit
Statement of Basis**

Company: Rogers Group Inc.

Plant Location: 13400 Henry Road, Louisville, KY 40223

Date Application Received: 1/20/2006

Date of Draft Permit: 06 27 2014

Date of Proposed Permit: 06 27 2014

District Engineer: Chris Gerstle

Permit No: 27662-14-F

Plant ID: 145

SIC Code: 1422

NAICS: 212312

AFS: 00145

Introduction:

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), 1 hr and 8 hr ozone (O₃), and particulate matter less than 10 microns (PM₁₀); and is a non-attainment area for particulate matter less than 2.5 microns (PM_{2.5}) and partial non-attainment for sulfur dioxide (SO₂).

Application Type/Permit Activity:

☒ Initial Issuance

☐ Permit Revision

☐ Administrative

☐ Minor

☐ Significant

☐ Permit Renewal

Compliance Summary:

☒ Compliance certification signed

☐ Compliance schedule included

☐ Source is out of compliance

☒ Source is operating in compliance

I. Source Information

1. **Product/Process Description:** The source mines, crushes, stores, and sells limestone.
2. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
3. **Emission Unit Summary:**

Unit	Name
U-1	Limestone Crushing
IA-1	Parts Washer
IA-EG	Emergency Generator(s)

4. **Fugitive Sources:** Truck traffic
5. **Permit Revisions:**

Revision No.	Date or Reissuance	Public Notice Date	Type	Emission Unit	Description
Initial	Xx/xx/2014	06/27/2014	Initial	Entire Permit	Initial Issuance

6. Plant-wide Emission Summary:

Pollutant	Potential Emissions (tpy)	Major Source Status (based on PTE)
CO	0.02	No
NO _x	0.12	No
SO ₂	1.57	No
PM/PM ₁₀	445/158	Yes
VOC	0.05	No
Total HAPs	0.00	No
GHG	162	No

7. Applicable Requirements:

☐ PSD ☒ 40 CFR 60 ☒ 40 CFR 63 ☒ SIP
☐ NSR ☐ 40 CFR 61 ☒ District-Origin ☒ Other

8. MACT Requirements: The source has no future MACT requirements.**9. Referenced Federal Regulations in Permit:**

40 CFR 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR 61, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 80, Subpart I	Motor Vehicle Diesel Fuel; Nonroad, Locomotive, and Marine Diesel Fuel; and ECA Marine Fuel

40 CFR 89, Subpart B
40 CFR 1039, Subpart B

Emission Standards and Certification Provisions
Emission Standards and Related Requirements

II. Regulatory Analysis

1. **Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount. If the source becomes subject to 40 CFR 68 and Regulation 5.15, the source shall comply with the Risk Management Program and Regulation 5.15 and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA 22116-3346
4. **40 CFR Part 64 Applicability Determination:** The source is not subject to 40 CFR Part 64 - Compliance Assurance Monitoring for Major Stationary Sources.
5. **Basis of Regulation Applicability**

a. Plant-wide

The source is a potential major source for the pollutant PM₁₀. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

The source is a synthetic minor that took emission limits for PM₁₀ in order to stay below major source threshold levels. This limit is 25 tons per year of PM₁₀. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements for synthetic minors.

As defined by Regulation 5.00, section 1.13.5, in order to be an exempt stationary source in regards to STAR, the source has applied for an operating permit in accordance with Regulation 2.17 with emission limits that do not exceed the following:

Pollutant	Emissions (tpy)
PM ₁₀	25

Regulation 2.17, section 5.2 requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an annual compliance certification by April 15. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an annual compliance report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

b. **Applicable Regulations:**

Regulation	Title	Type
1.14	Control of Fugitive Particulate Emissions	SIP
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	SIP
7.08	Standards of Performance for New Process Operations	SIP
40 CFR 60 OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	Federal

c. **Basis for Applicability**

Regulation	Basis for Applicability
1.14	Applies to sources which generate fugitive particulate emissions
6.18	Applies to cold cleaners.
7.08	Equipment installed after September 1, 1976 and subject to the PM emission standard.
40 CFR 60 OOO	Applies to affected facilities in fixed or portable nonmetallic mineral processing plants.

d. **Emission Unit U-1 Limestone Crushing**

i. **Equipment**

Emission Process	Description	Applicable Regulations	Install Date
TC1, TC2	Transfer Conveyors; 1,000 ton per hour (each)	1.14;7.08; 40 CFR 60 OOO	2005
TC5	Transfer Conveyor; 500 ton per hour		2005
TC3, TC4	Transfer Conveyors; 300 ton per hour (each)		2005
TC6 – TC10, TC12 – TC21, TC27	Transfer Conveyors; 200 ton per hour (each)		2005/2014
TC11, WC-21, WC-3	Transfer Conveyors; 150 ton per hour (each)		2005
WC-1, TC22, TC23	Transfer Conveyors; 100 ton per hour (each)		2005
TC24 – TC26	Transfer Conveyors; 50 ton per hour (each)		2005

1 The 'WC' conveyors and Wash Screen are water saturated.

Emission Process	Description	Applicable Regulations	Install Date
SC1	Scalping Screen; 1,000 ton per hour		2013
SC2	6' x 20' TD Finishing Screen; 500 ton per hour		2013
SC3	6' x 20' TD Finishing Screen; 400 ton per hour		2013
SC5	Wash Screen; 200 ton per hour		2005
SC6	6' x 20' Bivi-Tec Screen; 150 ton per hour	1.14 7.08 40 CFR 60 OOO	2005
CR1	Secondary/Tertiary Crusher; 400 ton per hour		2005
CR2, CR3	Crushers; 200 ton per hour		2005
B1 – B10	Storage Bins; 100 ton per hour		2005

ii. **Standards/Operating Limits**

1) **Opacity**

Regulation 40 CFR 60 Subpart OOO, section 672(b) establishes an opacity standards.

2) **PM/PM₁₀**

In accordance with Regulation 7.08, Table 1, PM standard for each cutter is:

$$E = 17.31 \times (\text{tons per hour})^{0.16} = \text{lb/hr limit}$$

(The source submitted a one-time demonstration on 3/18/2004 that shows the potential uncontrolled PM emissions cannot exceed the PM emission standards.)

III. Other Requirements

1. Temporary Sources: The source did not request to operate any temporary facilities.

2. Short Term Activities: The source did not report any short term activities.

3. Emissions Trading: N/A

4. Operational Flexibility: The source did not request any operational flexibility.

5. Compliance History: The source has no known non-compliance.

6. Calculation Methodology:

Limestone Crushing (U-1): Emission factors from AP-42 Chapter 11.19.2 *Crushed Stone Processing and Pulverized Mineral*, Table 11.19.2-2 and monthly plant-wide throughput.

7. Insignificant Activities:

Equipment	Quantity	PTE(tpy)	Reg. Basis
Diesel storage tanks	3	0.04 (VOC)	Regulation 1.02, Appendix A
Cold solvent parts cleaners	1	0.02 (VOC)	Regulation 1.02
Shop Heater utilizing waste oil generated on site	1	4.19 (PM ₁₀)	Regulation 1.02

- 1) Insignificant Activities identified in District Regulation 1.02, Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.
- 6) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 7) The owner or operator shall submit an updated list of Insignificant Activities whenever changes in equipment located at the facility occur that cause changes to the plant wide emissions.

8. IA Emission Units with Applicable Regulations

a. Emission Unit IA-1 Cold Solvent Wash

i. Equipment

Emission Process	Description	Applicable Regulations	Install Date
IA-1	Cold Solvent Parts Washer	1.02 6.18	2005

ii. Standards/Operating Limits

1) VOC

Per Regulation 6.18, the owner or operator shall observe specific operating requirements, and shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

b. Emission Unit IA-EG

i. Equipment

Emission Point	Description	Applicable Regulation	Basis for Applicability
IA -EG	Emergency diesel generators that installed after July 11, 2005 and manufactured after April 1, 2006, with a maximum engine power less than or	40 CFR 63, Subpart ZZZZ, 40 CFR 60, Subpart IIII	40CFR60 Subpart IIII applies to manufacturers, owner or operators of new stationary compression ignition internal combustion engines. 40CFR63 Subpart ZZZZ establishes national emission limitations and operating limitations for HAP emitted from stationary RICE located

Emission Point	Description	Applicable Regulation	Basis for Applicability
	equal to 500 HP and located at an area source of HAP.		at major and area sources of HAP emissions.

ii. **Standards/Operating Limits**

1) Unit Operation

(a) 40 CFR 60.4202 and 4205 establish emission standards for the owner or operator or manufacturer of the emergency stationary CI ICE.

(b) 40 CFR 60.4211 establishes unit operation requirements for emergency stationary CI ICE.

2) Fuel requirements

40 CFR 60.4207 establishes requirement for nonroad diesel fuel.

iii. **Monitoring and Record Keeping**

1) Unit Operation

40 CFR 60.4209(a) and 4214(b) establish monitoring and record keeping requirements for emergency stationary CI ICE.

iv. **Reporting**

1) Unit Operation

40 CFR 60.4214 establish reporting requirements for emergency stationary CI ICE.

v. **Testing**

1) Federal Regulation 40 CFR 60, Subpart III, section 60.4212 establishes testing requirements for CI ICE.